Atty Dkt. No.: NJPO-001 USSN: 10/550,813

## **AMENDMENTS TO THE CLAIMS**

Please amend the claims as indicated. A complete listing of the claims in this case, with their status, is shown below.

1. (Currently Amended) A piezoelectric dispensing apparatus comprising:

a removable reservoir having an open top and an outlet at a base of the reservoir for containing liquid to be dispensed from the apparatus;

a piezoelectric dispensing tube defining a bore in fluid communication with the reservoir, the piezoelectric dispensing tube comprising a dispensing end and a non-dispensing end;

a first filter extending across the outlet at the base of the reservoir for filtering liquids passing through the outlet;

a second filter being located between the reservoir and the non-dispensing end of the piezoelectric dispensing tube to prevent particulate matter collected on an underside of the reservoir from entering the piezoelectric dispensing tube; and

means for applying a vacuum-and/or and pressure to the contents of the reservoir when the reservoir is located in the apparatus, wherein the means for applying the vacuum and pressure is configured to apply the vacuum such that the piezoelectric dispensing tube is operated under low vacuum conditions for droplet dispensing to control a fluid meniscus at an orifice of the piezoelectric dispensing tube.

- 2. (Previously Presented) A piezoelectric dispensing apparatus as claimed in claim 1 wherein the top of the reservoir is defined to allow liquids to be poured into the reservoir.
- 3. (Original) A piezoelectric dispensing apparatus as claimed in claim 2 wherein the top of the reservoir is flared outwardly.
- 4. (**Currently Amended**) A piezoelectric dispensing apparatus as claimed in claim 3 wherein the means for applying a vacuum-and/or\_and pressure to the contents of the reservoir when the reservoir is located in the apparatus comprises a plunger shaped and configured to abut with and seal the top of the reservoir.

Atty Dkt. No.: NJPO-001 USSN: 10/550,813

5. (Previously presented) A piezoelectric dispensing apparatus as claimed in claim 4 wherein the plunger comprises a through bore to permit the application of vacuum or pressure to the reagent vessel through the bore.

- 6. (Previously presented) A piezoelectric dispensing apparatus as claimed in claim 4 comprising a seat for receiving the removable reservoir and means for moving the plunger up and down towards and away from the seat.
  - 7. (Cancelled)
  - 8. (Cancelled)
  - 9. (Cancelled)
  - 10. (Currently Amended) A piezoelectric dispensing device comprising:

a reservoir for containing liquid to be dispensed from the device, the reservoir comprising an open top and an outlet at a base of the reservoir;

a first filter extending across the outlet at the base of the reservoir for filtering liquids passing through the outlet;

a piezoelectric dispensing tube defining a bore in fluid communication with the reservoir, the piezoelectric dispensing tube having a dispensing end and a non-dispensing end;

a second filter being located between the outlet at the base of the reservoir and the nondispensing end of the piezoelectric dispensing tube; and

means for removably attaching the non-dispensing end of the piezoelectric dispensing tube in fluid communication with the reservoir, the attaching means comprising a closure means disposed at the base of the reservoir for closing the outlet of the reservoir when the reservoir is not attached to the piezoelectric dispensing tube; and

means for applying a vacuum and pressure to the contents of the reservoir when the reservoir is located in the apparatus, wherein the means for applying the vacuum and pressure is configured to apply the vacuum such that the piezoelectric dispensing tube is operated under low

Atty Dkt. No.: NJPO-001

USSN: 10/550,813

vacuum conditions for droplet dispensing to control a fluid meniscus at an orifice of the

piezoelectric dispensing tube.

11. (Previously presented) A piezoelectric dispensing device as claimed in claim 10 further

comprising an annular foot portion on which the base of the reservoir is positionable wherein the closure

means is spaced from the surface on which the foot rests.

12. (Withdrawn) A piezoelectric dispensing device as claimed in claim 11 further comprising a

handle attached to the reservoir.

13. (Previously presented) A piezoelectric dispensing device as claimed in claim 10 wherein

the closure means is a septum.

14. (Withdrawn) A piezoelectric dispensing device as claimed in claim 10 wherein the closure

means is a valve.

15. (Currently Amended) A piezoelectric dispensing device comprising:

a reservoir for containing liquid to be dispensed from the device and comprising an open top and

an outlet at a base of the reservoir;

a piezoelectric dispensing tube defining a bore in fluid communication with the reservoir, the

piezoelectric dispensing tube having a dispensing end and a non-dispensing end;

a first filter extending across the outlet of the reservoir for filtering liquids passing through the

outlet;

a secondary filter assembly removably attachable to the base of the reservoir, the secondary filter

assembly defining a bore in fluid communication with the reservoir when the secondary filter assembly

is attached to the base of the reservoir, the secondary filter assembly comprising means for removably

attaching the non-dispensing end of the piezoelectric dispensing tube in fluid communication with the

bore of the secondary filter assembly and a second filter extending across the bore of the secondary filter

assembly; [[and]]

means for closing the outlet of the reservoir when the removable secondary filter assembly is not

attached to the reservoir; and

4

Atty Dkt. No.: NJPO-001

USSN: 10/550,813

means for applying a vacuum and pressure to the contents of the reservoir when the reservoir is located in the apparatus, wherein the means for applying the vacuum and pressure is configured to apply the vacuum such that the piezoelectric dispensing tube is operated under low vacuum conditions for droplet dispensing to control a fluid meniscus at an orifice of the piezoelectric dispensing tube.

16. (Cancelled)

- (Withdrawn) A piezoelectric dispensing device as claimed in claim 15 wherein the means for closing the outlet of the reservoir is a valve.
- 18. (Previously Presented) A piezoelectric dispensing device as claimed in claim 15 wherein the means for closing the outlet of the reservoir is a septum and wherein a hollow needle for piercing the septum projects from the secondary filter assembly.
  - 19. (Currently Amended) A piezoelectric dispensing apparatus comprising:

a reservoir for containing liquid to be dispensed from the device, the reservoir comprising an open top and an outlet at a base of the reservoir;

a first filter extending across the outlet for filtering liquids passing through the outlet;

a piezoelectric dispensing tube defining a bore in fluid communication with the reservoir, the piezoelectric dispensing tube having a dispensing end and a non-dispensing end;

a secondary filter assembly removably attachable to the base of the reservoir, the secondary filter assembly defining a bore in fluid communication with the reservoir when the secondary filter assembly is attached to the base of the reservoir, the secondary filter assembly comprising means for removably attaching the non-dispensing end of the piezoelectric dispensing tube in fluid communication with the bore of the secondary filter assembly and a second filter extending across the bore of the secondary filter assembly;

means for removably attaching the non-dispensing end of the piezoelectric dispensing tube in fluid communication with the reservoir;

a closure means disposed at the base of the reservoir for closing the outlet of the reservoir when the removable secondary filter is not attached to the reservoir;

Atty Dkt. No.: NJPO-001 USSN: 10/550,813

an apparatus defining a seat for receiving the removable reservoir in the apparatus; and means for applying a vacuum—and/or\_and pressure to the contents of the reservoir, said applying means the means for applying the vacuum and pressure comprising a plunger shaped and configured to abut with and seal the open top of the reservoir, the plunger defining a through bore to permit the application of vacuum—and/or\_and pressure to the reservoir through the bore, the plunger being movable relative to the seat, wherein the means for applying the vacuum and pressure is configured to apply the vacuum such that the piezoelectric dispensing tube is operated under low vacuum conditions for droplet dispensing to control a fluid meniscus at an orifice of the piezoelectric dispensing tube.

20. (**Currently Amended**) A method of dispensing fluid from a piezoelectric dispensing device, the device comprising:

a reservoir for containing liquid to be dispensed from the device, the reservoir comprising an open top and an outlet at a base of the reservoir;

a first filter extending across a base of the outlet for filtering liquids passing through the outlet; a piezoelectric tube defining a bore in fluid communication with the reservoir, the piezoelectric dispensing tube having a dispensing end and a non dispensing end;

a second filter being located at the non-dispensing end of the piezoelectric dispensing tube; means for removably attaching the non-dispensing end of the piezoelectric dispensing tube in fluid communication with the reservoir, the attaching means comprising a closure means disposed at the base of the reservoir for closing the outlet of the reservoir when the reservoir is not attached to the piezoelectric dispensing tube; and

means for applying a vacuum-and/or and pressure to the contents of the reservoir when the reservoir is located in the device, said the means for applying [[a]] the vacuum-and/or and pressure comprising a plunger shaped and configured to abut with and seal the open top of the reservoir, the plunger defining a through bore to permit the application of vacuum-and/or and pressure to the reservoir through the bore, wherein the means for applying the vacuum and pressure is configured to apply the vacuum such that the piezoelectric dispensing tube is operated under low vacuum conditions for droplet dispensing to control a fluid meniscus at an orifice of the piezoelectric dispensing tube,

the method comprising the steps of:

pouring a liquid into the reservoir via the open top;

Atty Dkt. No.: NJPO-001 USSN: 10/550,813

applying the plunger to the open top to seal the open top and applying a vacuum and /or pressure to the contents of the reservoir; and

dispensing one or more droplets of liquid from the dispensing end.